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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,362	12/28/2000	John R. Doner	GEH-01-067	8249

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EXAMINER	
PHAN, THAI Q	

ART UNIT	PAPER NUMBER
2128	8

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/751,362	DONER, JOHN R.	
	Examiner	Art Unit	
	Thai Q. Phan	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to patent application S/N: 09/751,362. Claims 1-37 are now pending in the action.

Information Disclosure Statement

The information disclosure statement (IDS), submitted on 01/02/2002, is being considered by the examiner.

Drawings

The drawings are acceptable for examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gabriner et al, US Patent no. 5,848,403.

As per claim 1, Gabriner discloses a method and system for scheduling task processing with feature limitations very similar to the claimed invention (Background and Abstract of the Invention). According to Gabriner, the method includes steps

Inputting initial parameters to a computer for yard task flow,

Simulating yard task flow using a yard performance plan or plan capacity, and the initial parameters (col. 9, lines 41-57, col. 10, lines 12-42, for example), and

Determining if the schedule for the yard based on the simulated yard task flow (col. 10, line 54 to col. 12, line 67, for example). Gabriner discloses task flow scheduling in service areas such as maintenance service, repair services, mechanical services for engine, system, etc. Gabriner does not explicitly disclose train yard service.

It would be obvious for practitioner in the art at the time of the invention was made to apply Gabriner disclosure to real world application such as scheduling services for train yard (train yard provides services and it requires service and task scheduling) to optimize service scheduling as suggested in the Garbriner's Background of the Invention.

As per claim 2, Gabriner discloses parameters used in task flow analysis and scheduling (col. 4, lines 18-28, col. 7, lines 1-17, cols. 9-10, for example).

As per claim 3, Gabriner discloses task flow service management in industrial applications. Gabriner does not explicitly disclose detail services in rail yard as claimed. It would be obvious for those skilled in the art at the time of the invention was made to apply Gabriner disclosure into the train service area with task flows as known in the rail yard in order to optimize task schedule.

As per claims 4-13, Gabriner discloses a plurality of factors associated with tasks and resources (col. 9, lines 41-57, col. 10, lines 32-64, cols. 11-12) in task flow scheduling. It would be obvious for those skilled in the art to combine other related factor into the dynamical scheduling model to optimize task flow and task scheduling in real world as suggested in Gabriner.

As per claim 14, Gabriner discloses a method and system for scheduling task processing with feature limitations very similar to the claimed invention (Background and Abstract of the Invention). According to Gabriner, the system includes means configured to perform steps

Inputting initial parameters to a computer for yard task flow,

Simulating yard task flow using a yard performance plan or plan capacity, and the initial parameters (col. 9, lines 41-57, col. 10, lines 12-42, for example), and

Determining if the schedule for the yard based on the simulated yard task flow (col. 10, line 54 to col. 12, line 67, for example). Gabriner discloses task flow scheduling in service areas such as maintenance service, repair services, mechanical services for engine, system, etc. Gabriner does not explicitly disclose train yard service.

It would be obvious for practitioner in the art at the time of the invention was made to apply Gabriner disclosure to real world application such as scheduling services for train yard (train yard provides services and it requires service and task scheduling) to optimize service scheduling as suggested in the Garbriner's Background of the Invention.

As per claim 15, Gabriner discloses parameters used in task flow analysis and scheduling (col. 4, lines 18-28, col. 7, lines 1-17, cols. 9-10, for example).

As per claim 16, Gabriner discloses task flow service management in industrial applications. Gabriner does not explicitly disclose detail services in rail yard as claimed. It would be obvious for those skilled in the art at the time of the invention was made to

apply Gabriner disclosure into the train service area with task flows as known in the rail yard in order to optimize task schedule in the yard performance.

As per claims 17-26, Gabriner discloses a plurality of factors associated with tasks and resources (col. 9, lines 41-57, col. 10, lines 32-64, cols. 11-12) in task flow scheduling and task flow optimization. It would be obvious for those skilled in the art to combine other related factor into the dynamical scheduling model to optimize task flow and task scheduling in real world as suggested in Gabriner. Such task flow would be tasks in the rail yard because the rail yard uses service tasks to provide services to maintain train operation.

Similarly, claims 27-37 are directed to a simulation model for modeling a task flow and simulating performance of the task flow for scheduling. The modeling system includes steps and means as claimed above. Claims 27-37 are thus rejected under the same rationales as set forth.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. US patent no. 4,843,575, issued to Crane, Harold, on June 1989
2. US patent no. 5,255,181, issued to Chapman et al, on Oct. 1993
3. US patent no. 6,154,735, issued to Crone, Michael, on Nov. 2000
4. US patent no. 6,304,801, issued to Doner, John, on Oct. 2001
5. US patent no. 6,519,595, issued to Rose, Forrest, on Feb. 2003

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thai Phan whose telephone number is 703-305-3812.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 703-305-9704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T.P.
June 10, 2004

Thai Phan
Patent Examiner
AU: 2128